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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,584	12/18/2001	Ki Hyun Chung	HI-0048	6148

34610   7590   09/02/2004

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EXAMINER
DILLER, JESSE DAVID

ART UNIT	PAPER NUMBER
2187	

DATE MAILED: 09/02/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 December 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 December 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☒ Certified copies of the priority documents have been received in Application No. 10/017,584.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

1.   The examiner acknowledges the submission of the preliminary
amendment filed December 18, 2001.

2.   Claims 1 - 26 are pending in the application.

Priority

3.   Acknowledgment is made of applicant's claim for foreign priority under 35
U.S.C. 119(a)-(d). The certified copy has been filed in the instant application,
No. 10/017,584, which was filed on December 18, 2001.

Drawings

4.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)
because they include the following reference character(s) not mentioned in the
description: "45". Amendment to the specification to add the reference character
in the drawings in compliance with 37 CFR 1.121(b) or corrected drawing sheets
in compliance with 37 CFR 1.121(d) are required in reply to the Office action to
avoid abandonment of the application. Any amended replacement drawing sheet
should include all of the figures appearing on the immediate prior version of the
sheet, even if only one figure is being amended. The replacement sheet(s)
should be labeled "Replacement Sheet" in the page header (as per 37 CFR
1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes
are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the

drawings will not be held in abeyance.

Specification

5.   On page 2, paragraph 7, line 6, after "an index," "it" should be replaced by

--is--.

6.   On page 6, paragraph 27, lines 6 and 8, and paragraph 28, lines 2,3, and

9, reference is made to: "the [second] name for index No. [2]." Unless applicant

intended to disclose indices with multiple names per index, these occurrences

should be modified to correspond with Page 6, paragraph 27, lines 1-2, where "a

second name, associated with index No. 2" is disclosed. A suggested resolution

is "the name for index No. [2]."

7.   On page 9, paragraph 41, lines 4-5, it is stated: "If a desired index found

data on the identification item corresponding to the index can be added or

updated." It appears that "If a desired *index is found, data for* the identification

item corresponding to the index can be added or updated" was intended.

     Appropriate correction is required.

Claim Rejections - 35 USC § 112

8.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and
> process of making and using it, in such full, clear, concise, and exact terms as to enable any

person skilled in the art to which it pertains, or with which it is most nearly connected, to make
and use the same and shall set forth the best mode contemplated by the inventor of carrying
out his invention.

9.   Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the

time the application was filed, had possession of the claimed invention. The

specification and claims make use of the terms "field," "field memory," and

"memory area" extensively. However, these terms are not defined clearly, or are

used ambiguously.

10.   The Microsoft Computer Dictionary (2002: Microsoft Corporation) defines

a "field" as a location in a record, or a space in a form, which "holds a specific

item of information." This definition is used in the present disclosure. However,

the disclosure also uses the term to refer to a collection of items of information,

similar to a "record" or "data structure." These two meanings are used in the

disclosure interchangeably, with no differentiation. The present disclosure also

uses the terms "memory area" and "field memory" interchangeably with "field,"

after initially defining them otherwise.

11.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

12.   Claims 4 and 20-26 are rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

13.   Regarding claim 4, the phrase "individual information" renders the claim

indefinite because the meaning of the phrase "individual information" is unclear.

For the purpose of prior art examination, it has been taken to mean "information

regarding individuals, (i.e., people)."

14.   Claims 20 and 25 recite the limitation "each of the plurality of data" in

Claim 20, line 3, and Claim 25, lines 2 and 3. There is insufficient antecedent

basis for this limitation in the claim. If "each of the plurality of data groups" was

meant, the claims must be amended.

15.   Claims 21-24 and 26 are rejected because they include the limitations of

claims 20 and 25, respectively.

Claim Rejections - 35 USC § 102

16.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9.   Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification and claims make use of the terms "field," "field memory," and "memory area" extensively. However, these terms are not defined clearly, or are used ambiguously.

10.   The Microsoft Computer Dictionary (2002: Microsoft Corporation) defines a "field" as a location in a record, or a space in a form, which "holds *a specific item* of information." This definition is used in the present disclosure. However, the disclosure also uses the term to refer to a collection of items of information, similar to a "record" or "data structure." These two meanings are used in the disclosure interchangeably, with no differentiation. The present disclosure also uses the terms "memory area" and "field memory" interchangeably with "field," after initially defining them otherwise.

11.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12.   Claims 4 and 20-26 are rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

13.   Regarding claim 4, the phrase "individual information" renders the claim

indefinite because the meaning of the phrase "individual information" is unclear.

For the purpose of prior art examination, it has been taken to mean "information

regarding individuals, (i.e., people)."

14.   Claims 20 and 25 recite the limitation "each of the plurality of data" in

Claim 20, line 3, and Claim 25, lines 2 and 3. There is insufficient antecedent

basis for this limitation in the claim. If "each of the plurality of data groups" was

meant, the claims must be amended.

15.   Claims 21-24 and 26 are rejected because they include the limitations of

claims 20 and 25, respectively.

Claim Rejections - 35 USC § 102

16.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in
> public use or on sale in this country, more than one year prior to the date of application for patent in
> the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17.   Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Gusack (U.S. Patent # 6,112,209).

18.   With respect to claim 1, Gusack teaches a method for using a memory area (Col. 67, lines 42-43 teach that the information is "stored on electronic-based media in a computer"), comprising:

- assigning a memory region (609 and 611, Fig. 6 define a domain start and end for a memory region) to each of a plurality of data fields (Col. 7, lines 27-29 describe a plurality of data fields collated into a "table", and Col. 7, lines 29-30 refer to multiple tables); and

- designating an index number (603, Fig. 6 shows an index number) according to types of data (605, Fig. 6 ties the index number to data tables, items 905 and 917, showing differing types of data) in the memory region.

19.   With respect to claim 2, Gusack teaches that:

- data is saved in each of the plurality of field (Col. 6, line 64 - Col. 7, line 2) by an individual index number (Col. 7, lines 15-16; 621, Fig. 6).

20.   With respect to claim 3, Gusack teaches that:

- The plurality of fields (i.e., table) comprises at least one of a name field, a company name field, an e-mail address field, a telephone number field, and a fax number field. (905, 907, 919, Fig. 9)

21.   With respect to claim 4, Gusack teaches that:

- data are individual information (101, Fig. 1; 903, Fig. 9) saved in the field.

22.   No patentable weight has been given to "mobile communications terminal," because the claims are able to stand on their own, being generic and independent of implementation choice. "Mobile communications terminal" appears simply to be a preferred enclosure.

23.   Claims 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Bates (U. S. Patent # 6,247,043 B1).

24.   With respect to claim 12, Bates teaches:

- A method for using a memory area in a mobile communications terminal (Col. 5, lines 50-51 teach that the invention may be in a mobile computer; Col. 5, line 58 – Col. 6, line 4 teach memories. The "mobile computer" is shown to include communication equipment in Col. 6, lines 21-25; also see Figs 1 and 2), comprising:

- Inputting data in a memory area by a user (Figs. 8, 9; 122, Fig. 7. "In a memory area" is inherent in data entry for any computer system – all information is stored, however temporarily, in a memory.);

- Searching for the existence of a corresponding index of the entered data (146, Fig. 10 shows a search for an entry corresponding to the entered data. "The Authoritative Dictionary of IEEE Standards Terms" defines an index as "a data item that identifies a particular element in a set of items such as an array." Col. 9, line 36 identifies a field 94, (the name field), as

identifying the user entry 92 of Fig. 5. Therefore, the name field 94 of Fig. 5 reads on claim 12.); and

- Updating the relevant data if the corresponding index is found (146 and 150, Fig. 10 show an update to the data entry 92, Fig. 5 if the search was successful).

25.   With respect to Claim 13, Bates teaches the limitations of claim 12, and additionally teaches:

- Creating a new index for the entered data if the corresponding index does not exist (146 and 148, Fig. 10 shows the creation of a new entry in the table, which entry includes an index 94, Fig. 5 if the search for the index was not successful).

26.   For the purpose of examination, "*corresponding* index" has been taken to mean "a related index," because more specific criteria for correspondence have not been defined.

27.   Claims 1, 5-6, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Robertson (U.S. Patent # 6,269,369 B1).

28.   With respect to claim 1, Robertson teaches a method for using a memory area (Col. 67, lines 42-43 teach that "the database contains contact information"; said database 240 exists in a computer server 230, Fig. 4), comprising:

- assigning a memory region to each of a plurality of data fields (i.e., tables; Col. 5, line 9 refers to fields in a table; Col. 7, lines 46-47 teach that

information is contained in the tables 350 of the database 340 on a server

330, shown in Fig. 4); and

- designating an index number according to types of data in the memory

  region. (Col. 4, line 65-Col 5, line 4 number the tables, and show the

  different types of data in the tables)

29.   With respect to claim 5, Robertson teaches that:

- a common index number (CustomerID, #420-21, 440-41, 440-43, Fig. 6) is

  assigned to a plurality of data items belonging to a same class, wherein

  each of the plurality of data items belonging to the class is associated with

  a different data field (Col. 5, 6-9 teaches that all the data relating to a

  single class, that of a member, is linked by a common CustomerID

  number).

30.   With respect to claim 6, Robertson teaches that:

- each class represents a single person (Col. 5, 6-9 teaches that all the data

  relating to a single person is linked by a common CustomerID number).

31.   With respect to claim 9, Robertson teaches that:

- a prescribed memory region is accessed (Col. 16, lines 34-40 teach

  accessing and subsequent processing of the data in a prescribed memory

  region, that of the Group table) by inputting the index number or a key

  word (Col. 16, line 33 teaches that the group name, a key word, is

  submitted).

32.   No patentable weight has been given to "mobile communications

terminal," because the claims are able to stand on their own, being generic and

independent of implementation choice. "Mobile communications terminal"

appears simply to be a preferred enclosure.

Conclusion

33.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

34.   Hertzog, US Patent Application #09,565,641, discloses much of the same

information as Robertson, namely a multiplicity of record tables with primary and

individual indices, holding personal information. He also teaches that this type of

application may be contained on a PDA which includes communication means.

35.   Monica Rivituso, in an October 2000 article for www.SmartMoney.com,

notes the combination of PDA and cell phone capabilities, for the benefit of fewer

devices to carry and more capabilities in one device.

36.   Andrew Tanenbaum, in his book, *Structured Computer Organization*,

(1976, Prentiss-Hall) discusses the benefits of dynamic memory allocation on pp.

118-119. He states that for large sparse arrays of information, not allocating null

memory slots can save a large amount of memory.

37.   G. H. Gonnet, in *The Handbook of Algorithms and Data Structures,* (1991,

Addison-Wesley) discloses computer code defining an algorithm essentially

similar to the method disclosed in claims 7, 8, 10, 11, 14, 17, 18, 20, 21, 25, and

26, an insertion into a sorted array which necessitates moving existing array

elements to next memory locations.

38.   Goldstein, U. S. Patent # 5,963,642, notes that an insert into a simple array "necessitates that new arrays be constructed. At the very best, this will involve ... shifting the ... subvectors backwards in memory."
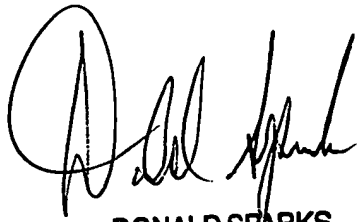
39.   Richard Varga, in Volume 1 of *The Art of Computer Programming,* (1976, Addison-Wesley) also discusses the reallocation of sequentially allocated arrays, which is required after the insertion disclosed in claim 8. He notes on page 247 that this algorithm "takes rather long to perform its job" and that "A very large number of moves will be made if a reasonably large number of items is put into the tables."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jesse D Diller whose telephone number is (703) 305-0472. The examiner can normally be reached between 8:30AM and 5:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (703) 308-1756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JD

DONALD SPARKS
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